

ABSTRACT

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The invention relates to the use of nanoparticles comprising a metal core containing at least one platinoid or an alloy of a platinoid, a first organic coating formed from molecules attached to the surface of the metal core and a second organic coating formed from molecules different from the molecules forming the first organic coating, and which are grafted onto molecules of the first organic coating, as catalysts.

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The invention also relates to novel nanoparticles that are useful as catalysts.

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The fields of application: devices for producing electrical energy, in particular in fuel cells, devices for detecting or assaying one or more chemical or biological species, in particular in sensors or multisensors, etc.